



April 10, 1995

Mr. Dary Newbry
U.S. Department of Energy
Pittsburgh Naval Reactors Office
Idaho Branch Office
P.O. Box 2469
Idaho Falls, Idaho 83403-2469

RE: Review of the Remedial Action Recommendations for the A1W Paint Locker French Drain (OU 8-03-22)

Dear Mr. Newbry:

This letter documents IDHW's concurrence with the remedial action proposed by USDOE-IBO for the A1W Paint Locker French Drain (OU 8-03-22) in a February 9, 1995 letter from Dary Newbry to Dean Nygard and Wayne Pierre. A brief summary supporting our position follows.

The A1W Paint Locker French Drain sump was three feet in diameter and twelve feet deep. The drain received runoff from the floor drains of the Circulating Water Building. Potential wastes disposed of in the floor drains include heavy-metal based paints and solvents. A CERCLA removal action was conducted at the French Drain from September 9-15, 1994. Approximately 13 cubic feet of sludge and rocks were removed from the drain before excavation ceased. The french drain was excavated to twelve feet below grade. Excavation was stopped because of retrieval and hole stability problems, and associated health and safety (i.e., confined space entry) concerns.

Samples of the excavated soils/sludges were collected and analyzed for volatile and semivolatile compounds, and inorganic constituents. No risk-based concentrations were exceeded for organic compounds. Concentrations of chromium, lead, mercury, and zinc exceeded the INEL Upper Tolerance Limit. The average concentrations of mercury in these soils/sludges exceeded risk-based limiting soil concentrations for soil ingestion pathway, but not for the groundwater ingestion pathway. In general, contaminant concentrations in the excavated materials appear to be decreasing with depth.

IDHW concurs with the NRF proposal to stop excavating contaminated soils from the french drain, and to grout the excavation to the surface. The rationale for this recommendation is as follows. First, the contaminated soils are at a depth of 12 feet below grade, which is deeper than the typical residential basement scenario of 10 feet. Therefore, the risk via surface and

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near surface pathways has already been mitigated. Secondly, although concentrations of mercury in the mid-level sludge sample exceeded the limiting soil concentration for the groundwater ingestion pathway, the average concentration of mercury in the sludges (i.e., 112 mg/kg) is less than the modeled limiting soil concentration. As stated previously, vertical sampling indicates that mercury concentrations appear to be decreasing with depth, so we consider it appropriate to use the average concentration for risk management decisions regarding this french drain. Furthermore, the french drain is located within an operational building, where access and maneuverability of large drilling or excavation equipment is restricted. Also, the excavation currently extends below the casing of the french drain. Thus, extending the excavation deeper by manual methods (i.e., without the use of large excavation equipment) would require stabilizing the hole so that workmen could safely enter the confined space of the former french drain. It is IDHW's opinion that further excavation at the french drain would be difficult to implement, costly, and would result in a minimal reduction in site risk. We agree that grouting the french drain to the surface would prevent continued infiltration of runoff and should reduce any continued downward migration of contaminants.

Sincerely,

A handwritten signature in cursive script, reading "Dean Nygard".

Dean Nygard, Manager
Federal Facilities Section
Remediation Bureau

ME/jc

cc: Linda Meyer, US EPA Region X
Margie English, DEQ-Boise
Shawn Rosenberger, DEQ-IF